

M I S S O U R I
DEPARTMENT OF
Natural Resources

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Division of Environmental Quality

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Jefferson City, Missouri 65101

314-751-3241

✓ File Number: 3.500 Franklin County
Labadie Plant

Permit Number: MO-0004812

October 3, 1975

Union Electric Company
1901 Gratiot Street
St. Louis, Missouri 63166

Gentlemen:

Pursuant to the Federal Water Pollution Control Act, under the authority granted to the State of Missouri and in compliance with the Missouri Clean Water Law, we have issued and are enclosing your National Pollutant Discharge Elimination System (NPDES) Permit to Discharge from your above-referenced facility.

Please READ your permit carefully: Your NPDES Permit to Discharge includes standard and special conditions which must be followed to remain in compliance with the requirements of the Federal Water Pollution Control Act and the Missouri Clean Water Law. Monitoring reports prescribed in the special conditions are required on a periodic basis. Copies of the necessary report forms will be sent under separate cover at a later date.

This NPDES Permit is both your Federal discharge permit and your new State operating permit and replaces all previous State operating permits for this facility. In all future correspondence regarding this facility, please refer to your NPDES Permit number, the facility name and the file number listed at the top of this page.

I am sure that you appreciate the importance of eliminating pollution from our Nation's waters and will abide by the terms and conditions of the NPDES Permit. If you have any questions concerning this permit, please do not hesitate to call this office or our regional office at St. Louis, 8460 Watson Road, St. Louis, Missouri 63119, or telephone 314-849-1313.

Yours truly,

James L. Wilson
Director
Department of Natural Resources

JLW/RHH/jas
Enclosure

cc: EPA - Permit Branch
Billing Dept. - Permit Branch

SLRO

ED_001094_00000082-00001

MISSOURI CLEAN WATER COMMISSION
AUTHORIZATION TO DISCHARGE UNDER THE
NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM

In compliance with the Federal Water Pollution Control Act, Public Law 92-500, 92nd Congress, (Hereinafter, the Act) as amended, and the Missouri Clean Water Law, (Chapter 204 R.S.Mo. Cum. Supp. 1973, hereinafter, the Law),

Owner: Union Electric Company

Owner's Address: 1901 Gratiot Street, St. Louis, Missouri 63166

Facility Name: Labadie Plant

Facility Address: P.O. Box 67, Labadie, Missouri 63055

Legal Description: S8, T44N, R2E, Franklin County

Receiving Stream & Basin: Missouri River (Lower Missouri River Basin)

is authorized to discharge from the facility described herein, in accordance with effluent limitations and monitoring requirements as set forth herein:


FACILITY DESCRIPTION - 2400 MW Steam Electric Power Plant

Discharge #001 consists of ash pond overflow and boiler blowdown. Discharge #002 consists of intake screen wash water. Discharge #003 consists of condenser cooling water. Discharge #004 consists of intake screen wash water. Discharge #005 consists of runoff from the facility grounds. Discharge #006 consists of coal pile drainage.

This permit shall become effective on October 3, 1975, unless appealed in accordance with Section 204.051.6 of the Law.

This permit and the authorization to discharge shall expire at midnight, 10/2/80.

Dated this 3rd day of October, 1975.


James L. Wilson
Director, Department of Natural Resources
Permit Administrator for Missouri Clean Water Commission

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

The permittee is authorized to discharge from outfall(s) with serial number(s) as specified in the application for this permit. The effluent limitations shall become effective on the dates specified herein. Such discharges shall be controlled, limited and monitored by the permittee as specified below:

	<u>EFFLUENT LIMITATIONS</u>			<u>MONITORING REQUIREMENTS</u>	
	Interim Limitations	Interim Limitations	Final Limitations	Measurement Frequency	Sample Type
Effective Date	N/A	Issuance	7/1/77		
Outfall Number and Effluent Parameter(s)	N/A	Daily Average	Daily Average		
<u>Outfall #001</u>		kg/day (lb/day)	mg/l		
Flow-m ³ /Day (MGD)		N/A	N/A	1/week	24 hr. total
Total Suspended Solids*		780 (1700)	30	1/week	grab
Oil & Grease*		160 (360)	15	1/week	grab
pH - Units (Not to be averaged)		6.0-9.2	6.0-9.0	1/week	grab
<u>Outfall #002</u>					
Flow-m ³ /Day (MGD)		N/A	N/A	1/month	24 hr. total
<u>Outfall #003</u>					
Flow-m ³ /Day (MGD)		N/A	N/A	1/day	24 hr. total
Temperature (Intake)		N/A <i>No Limit</i>	N/A <i>No Limit</i>	1/day	grab
Temperature <i>BTV/HE</i>		48°C (118°F) <i>10.63 x 10⁹</i>	48°C (118°F) <i>10.63 x 10⁹</i>	1/day	grab
<u>Outfall #004</u>					
Flow-m ³ /Day (MGD)		N/A	N/A	1/month	24 hr. total
<u>Outfall #005</u>					
Flow-m ³ /Day (MGD)		N/A	N/A	1/month	24 hr. total
<u>Outfall #006</u>					
Flow-m ³ /Day (MGD)		N/A	N/A	1/month	24 hr. total
Total Suspended Solids*		N/A	30	1/month	grab
pH - Units (Not to be averaged)		N/A	6.0-9.0	1/month	grab
* The final net quantitative limitations will be computed utilizing the flow data cumulated during the interim period.					

Monitoring reports shall be submitted quarterly ; the first report is due 4/28/76.

There shall be no discharge of floating solids or visible foam in other than trace amounts.

B. STANDARD CONDITIONS

In addition to specified conditions stated herein, this permit is subject to the attached Part I standard conditions dated October 1, 1975 , and hereby incorporated as though fully set forth herein.

C. SCHEDULE OF COMPLIANCE See Attached.

C. SCHEDULE OF COMPLIANCE

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Permit No. MO-0004812

1. Serial Numbers #001, #006

Report of Progress - January 1, 1976

Report of Progress - July 1, 1976

Report of Progress - January 1, 1977

Compliance with final effluent limitations by July 1, 1977.

2. Serial Numbers #002, #004, #005

Not Applicable

3. Discharge #003

The thermal component of this discharge is subject to effluent limitations that require the attainment of off-stream cooling by July 1, 1981, pursuant to Section 301 of the Act and 40 CFR 423 (Steam Electric Power Generating Point Source Category). Any renewal of this permit shall be conditioned on the above date and condition. Towards attainment of the above, the following schedule shall be met:

Report of Progress - January 1, 1976

Report of Progress - July 1, 1976

Report of Progress - April 1, 1977

Report of Progress - January 1, 1978

Report of Progress - October 1, 1978

Report of Progress - July 1, 1979

Report of Progress - May 1, 1980

Report of Progress - January 1, 1981

Compliance with final effluent limitations - July 1, 1981

The permittee has applied for alternate thermal limitations under Sec. 316a. A study is currently being conducted by the company. If the department approves the 316a waiver request alternate thermal limitations will be applied, and the schedule of compliance for discharge #003 will be amended. Prior to a formal approval or disapproval of the study the findings of the department will be placed on public notice for 30 day comment period.

D. OTHER REQUIREMENTS

1. Discharge Limitations

a. After July 1, 1977, there shall be no discharge of polychlorinated biphenyl compounds.

b. After July 1, 1977, and except for any untreated overflow from facilities designed, constructed and operated to treat the volume of material storage runoff and construction runoff which is associated with a 10 year, 24 hour rainfall event; discharges resulting from material storage runoff and construction runoff shall comply with the following limitations:

(1) Total suspended solids shall not exceed 50 mg/l at any time

(2) The pH shall not be less than 6.0 standard units nor greater than 9.0 standard units at anytime.

c. Discharge of wastewater from this facility must not alone or in combination with other sources cause the receiving stream to violate the following:

(1) Water temperatures and temperature differentials specified in Missouri Water Quality Standards shall be met.

(2) In addition, the permittee shall perform the following thermal monitoring:

The permittee shall determine the 2.8 C (5 F) contour line above ambient stream temperature and isotherms at approximately 1.1 C intervals within this contour line. When the 2.8 C (5 F) contour above ambient stream temperature exceeds the water quality standard maximum temperature allowable, the permittee shall further define this maximum temperature contour line. These contours and the area within the contours shall be determined at approximate three month intervals along with the percentage of the cross-sectional area and volume of flow his discharge comprises. The timing of the plume studies shall as much as possible correspond to the most critical temperature conditions in the stream, i.e. summer maximums and low flow conditions. After the initial year of measurements, the permittee shall continue to determine these contours and areas every three months, however, two of the quarterly measurements may be based on estimating procedures using the previous data. The results of these determinations shall be reported on a quarterly basis.

2. Intake Structure(s)

Within 90 days of the receipt of the permit the permittee shall submit to the Department for review, modification and approval the design for an intake monitoring program to document the effects of the plant intake structures on the various species and life stages of fish. Sampling shall be performed weekly (unless the permittee justifies an alternate schedule to the satisfaction of the Department) on random days and shall include the number, size, weight and species of fish trapped by the present intake structure. As assessment shall also be made of other nekton which may be entrained in the water used for cooling. The sampling program must be conducted in a manner to evaluate diel and seasonal fluctuations. The program shall also include stream flow, cooling water flow, source and discharge water temperature and screen operation schedule.

The monitoring program shall be implemented within 90 days after approval of the monitoring program. Monthly monitoring reports shall be submitted.

Within 18 months after plan approval the permittee shall submit a final report to the Department. Development of the report shall be guided by the "Development Document for Best Technology Available for minimizing Adverse Environmental Impact of Cooling Water Intake Structures" as proposed by EPA.

This report shall be evaluated with regard to Section 316(b) of the Act. As a result of this evaluation, the Department may modify the permit to establish an implementation schedule to insure compliance with Section 316(b) of the Act.

3. Pesticides

Any pesticide discharge from any point source shall comply with the requirements of the Federal Insecticide, Fungicide, and Rodenticide Act, as amended (7U.S.C. 136 et seq.) and the use of such pesticides shall be in a manner consistent with its label.